CHICAGO
Electric® Power Tools

14 GAUGE SWIVEL HEAD SHEAR

Model 92115

ASSEMBLY AND OPERATING INSTRUCTIONS

Distributed Exclusively by
HARBOR FREIGHT TOOLS®

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For technical questions, please call 1-800-444-3353.

PRODUCT SPECIFICATIONS

Capacity:	Up to 14 gauge sheet metal Up to 18 gauge stainless steel @ 150 inches per minute
Power Required:	120 V - 60HZ - 2.2 no-load Amps
Power Switch:	Variable Speed 0 - 2500 rpm
Dimensions:	11"L x 8"H x 2-1/2"W

Cutting Blades:	Tungston Carbide Steel
Power Cord:	UL Approved, 2 prong polarized plug
Cutting Head:	Aluminum. Swivels 360°
Weight:	4.8 Lbs.

SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

GENERAL SAFETY RULES

WARNING!

READ AND UNDERSTAND ALL INSTRUCTIONS
Failure to follow all instructions listed below may result in electric shock, fire, and/or serious injury.
SAVE THESE INSTRUCTIONS

WORK AREA

1. **Keep your work area clean and well lit.** Cluttered benches and dark areas invite accidents.

2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks which may ignite the dust or fumes.

3. **Keep bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control. Protect others in the work area from debris such as chips and sparks. Provide barriers or shields as needed.

ELECTRICAL SAFETY

4. **Grounded tools must be plugged into an outlet properly installed and grounded in accordance with all codes and ordinances. Never remove the grounding prong or modify the plug in any way. Do not use any adapter plugs. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded.** If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user.

5. **Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way.** Double insulation ⧈ eliminates the need for the three wire grounded power cord and grounded power supply system.

6. **Avoid body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerators.** There is an increased risk of electric shock if your body is grounded.

7. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

8. **Do not abuse the Power Cord. Never use the Power Cord to carry the tool or pull the Plug from an outlet. Keep the Power Cord away from heat, oil, sharp edges, or moving parts. Replace damaged Power Cords immediately.** Damaged Power Cords increase the risk of electric shock.

9. **When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W".** These extension cords are rated for outdoor use, and reduce the risk of electric shock.

PERSONAL SAFETY

10. **Stay alert. Watch what you are doing, and use common sense when operating a power tool. Do not use a power tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating power tools may result in serious personal injury.

11. **Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts.** Loose clothes, jewelry, or long hair can be caught in moving parts.

12. **Avoid accidental starting. Be sure the Power Switch is off before plugging in.** Carrying power tools with your finger on the Power Switch, or plugging in power tools with the Power Switch on, invites accidents.

13. **Remove adjusting keys or wrenches before turning the power tool on.** A wrench or a key that is left attached to a rotating part of the power tool may result in personal injury.

14. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the power tool in unexpected situations.

15. **Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions. Use heavy duty work gloves when working with sheet metal.

TOOL USE AND CARE

16. **Use clamps (not included) or other practical ways to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.

17. **Do not force the tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.

18. **Do not use the power tool if the Power Switch does not turn it on or off.** Any tool that cannot be controlled with the Power Switch is dangerous and must be replaced.

19. **Disconnect the Power Cord Plug from the power source before making any adjustments, changing accessories, or storing the tool.** Such preventive safety measures reduce the risk of starting the tool accidentally.

20. **Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.

21. **Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools with a sharp cutting edge are less likely to bind and are easier to control. Do not use a damaged tool. Tag damaged tools “Do not use” until repaired.

22. **Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool’s operation. If damaged, have the tool serviced before using.** Many accidents are caused by poorly maintained tools.

23. **Use only accessories that are recommended by the manufacturer for your model.** Accessories that may be suitable for one tool may become hazardous when used on another tool.

SERVICE

24. **Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury.

25. **When servicing a tool, use only identical replacement parts. Follow instructions in the *"Inspection, Maintenance, And Cleaning"* section of this manual.** Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES

1. **Maintain labels and nameplates on the shear.** These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.

2. **Always wear ANSI approved safety impact eye goggles and heavy work gloves when using the shear.** Using personal safety devices reduce the risk for injury. Safety impact eye goggles and heavy work gloves are available from Harbor Freight Tools.

3. **Maintain a safe working environment.** Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use a power tool in areas near flammable chemicals, dusts, and vapors. Do not use this product in a damp or wet location.

4. **When using a hand-held power tool, always maintain a firm grip on the tool with both hands to resist starting torque.**

5. **Always keep the extension cord away from moving parts on the tool.**

6. **Avoid unintentional starting.** Make sure you are prepared to begin work before turning on the shear.

7. **Do not force the shear.** This tool will do the work better and safer at the speed and capacity for which it was designed.

8. **Never lay the shear down until the motor has come to a complete stop.** The tool may create unforseen risk while the motor cycles down.

9. **Never leave the shear unattended when it is plugged into an electrical outlet.** Turn off the tool, and unplug it from its electrical outlet before leaving.

10. **Always unplug the shear from its electrical outlet before performing an inspection, maintenance, or cleaning procedures.**

11. ⚠ **WARNING!** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are: lead from lead-based paints, crystalline silica from bricks and cement or other masonry products, arsenic and chromium from chemically treated lumber. Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. *(California Health & Safety Code 25249.5, et seq.)*

12. ⚠ **WARNING!** People with pacemakers should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.

GROUNDING

⚠ WARNING!

Improperly connecting the grounding wire can result in the risk of electric shock. Check with a qualfified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

GROUNDED TOOLS: TOOLS WITH THREE PRONG PLUGS

1. Tools marked with "Grounding Required" have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. **(See Figure A.)**

2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically "live" terminal. **(See Figure A.)**

3. Your tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the following illustration. **(See Figure A.)**

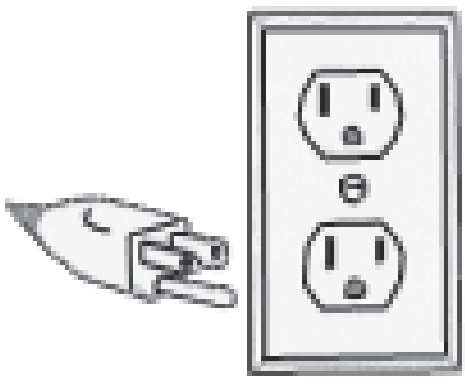


FIGURE A

DOUBLE INSULATED TOOLS: TOOLS WITH TWO PRONG PLUGS

4. Tools marked “Double Insulated” do not require grounding. They have a special double insulation system which satisfies OSHA requirements and complies with the applicable standards of Underwriters Laboratories, Inc., the Canadian Standard Association, and the National Electrical Code. **(See Figure B.)**

5. Double insulated tools may be used in either of the 120 volt outlets shown in the following illustration. **(See Figure B.)**

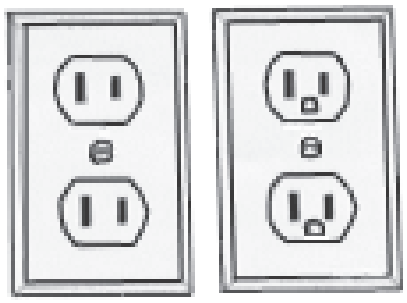


FIGURE B

EXTENSION CORDS

1. ***Grounded*** tools require a three wire extension cord. ***Double Insulated*** tools can use either a two or three wire extension cord.

2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. **(See Figure C, next page.)**

3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. **(See Figure C.)**

4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. **(See Figure C.)**

5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size.

6. If you are using an extension cord outdoors, make sure it is marked with the suffix “W-A” (“W” in Canada) to indicate it is acceptable for outdoor use.

7. Make sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.

8. Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.

RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120 VOLT)

NAMEPLATE AMPERES (At Full Load)	EXTENSION CORD LENGTH				
	25 Feet	50 Feet	75 Feet	100 Feet	150 Feet
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	16	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-

FIGURE C * Based on limiting the line voltage drop to five volts at 150% of the rated amperes.

SYMBOLOGY

	Double Insulated
	Canadian Standards Association
	Underwriters Laboratories, Inc.
V ~	Volts Alternating Current
A	Amperes
n_{o} xxxx/min.	No Load Revolutions per Minute (RPM)

UNPACKING

When unpacking, check to make sure that your item is in good condition, andall the following are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

Swivel Head Shear
Plastic Cover for Blades
Hex Key

WARNING: When working with sheet metal, always wear heavy gloves. The edges of sheet metal can be very sharp, and can cause severe personal injury.

ASSEMBLY AND OPERATING INSTRUCTIONS

NOTE: For additional information regarding the parts listed in the following pages, refer to the **Assembly Diagram on page 13**.

NOTE: It is a good idea to make a practice cut on a piece of scrap material before cuting the work material. This will allow you to be sure you are familiar with the way the tool operates, and that the cut can be made properly.

1. **CAUTION:** Always make sure the Power Cord is unplugged from its electrical outlet *prior* to assembling or making any adjustments to the tool.

2. Follow all safety precautions already discussed.

3. Plug the tool into an appropriate, breaker switch protected power outlet.

4. Position the jaws of the Shear over the edge of the sheet metal you will cut.

5. Squeeze the Power Switch to begin cutting the metal. The Power Switch is variable, allowing you to vary the cutting speed by the amount you squeeze it. As you squeeze more, the tool will increase speed, and it will cut more slowly as you release the Power Switch.

6. Move the Cutting Blades along the desired cutting line in the work material.

7. On large pieces of sheet metal, you may wish to swivel the head to one side or the other to prevent interference of the tool handle with the work material. Turn to page 11 for full instructions on how to swival the Cutting Head.

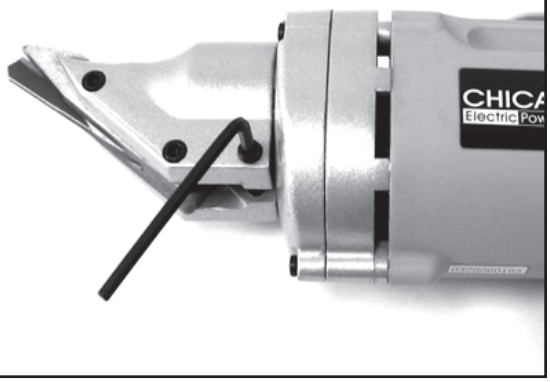
8. When you have completed the cut, release the Power Switch, unplug the tool, and store it properly.

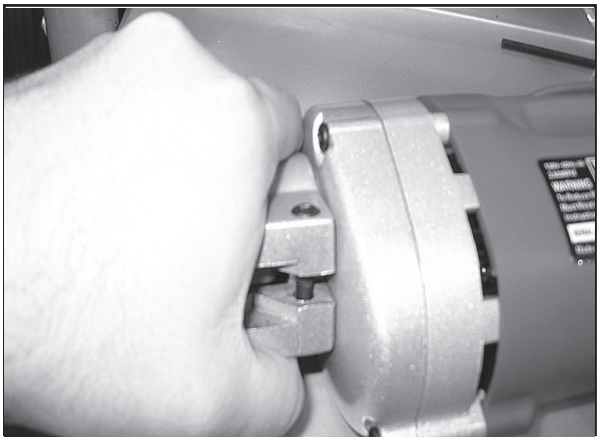
SWIVELING THE CUTTER HEAD

1. Loosen the hex head bolt using the hex wrench provided with this tool (see figure 1 below).
2. Firmly grip the cutter head and twist it to the desired position. Tighten the hex bolt to keep the Cutter Head in that position.

   WARNING: Wear leather gloves when performing this operation. You could cut your hand on the cutter blade.

Figure 1





MAINTINANCE

1. You may occasionally want to remove the Cutting Blades to clean or sharpen them. A Hex Tool is provided for you to do that.
2. Be sure the tool is unplugged before beginning work.
3. Place the tool on a workbench or other flat surface where you can easily work on it, and where you will not lose small parts.
4. Using the Hex Tool, remove the three Cap Screws and Nuts (23). Place these small parts in a safe place so they do not get lost.
5. The Fixed blades (24) and (27) will be loose, as will the Movable Blade (25) and two Bushings (26). Place the all parts in a safe place so they do not get lost.
6. Clean or sharpen the blades as required. **NOTE:** All maintenance should only be done by a qualified technician. Damage to this tool or loss of small parts by the owner or any unqualified person is not covered by the warranty.
7. Reassemble by repositioning the Blades, and Bushings. Replace the Cap Screws and Nuts. Tighten securely.
8. Test the product to be sure that it is working properly.

TROUBLESHOOTING

Warning: Be sure the power switch is in the OFF positiojn, and the tool is unplugged from its power source before attempting inspection or repair.

1. ***Tool does not turn on:*** Possible causes include no power at outlet, damaged power cord on tool, broken power switch on tool, burnt out electrical brushes on tool. Check outlet by testing a different electrical appliance known to work. Check condition of power cord. If tool still does not operate, take it to a qualified service technician for repair. **NOTE: Motor repair work including replacing electrical brushes should be done by a qualified repair technician only. The electrical brushes on this item are not owner servicable.**
2. ***Tool operates slowly:*** Possible causes include incorrect voltage at power outlet, damaged or dirty cutting blades, damaged or worn electrical brushes. Confirm that outlet delivers the correct voltage. Examine the cutting blades for obstruction, dirt or wear. If these suggestions do not repair the problem, take the tool to a qualified service technician for repair.
3. ***Tool does not cut satisfactorily:*** Possible causes include dirty, damaged or dull blades. If simple cleaning does not repair the problem, take the tool to a qualified service technician for repair.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTUER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Parts List

Part #	Description	Qty.
1	Tool Housing	1
2	Rear Motor Bushing	1
3	Motor Armature	1
4	Washer	2
5	Motor Mounting Bolt	2
6	Mid Motor Bushing	1
7	Motor Seal	1
8	Motor Winding	1
9	Front Motor Bushing	1
10	Housing Front Piece	1
11	Shear Head Seal	1
12	Cutting Head Rear Bushing	1
13	Cutting Head Gear	1
14	Cutting Head Gear Housing	1
15	Washer	3
16	Cutting Head Bolt	3
17	Cutting Head Rear Bearing	1
18	Cutting Head Rear Bushing	1
19	Cutting Head Seal	1
20	Cutting Head Front Bearing	1
21	Cutting Head Front Bushing	1
22	Cutting Head	1
23	Cap Screw and Nut	3
24	Right Fixed Blade	1
25	Movable Blade	1
26	Bushings	2
27	Left Fixed Blade	1
29	Power Switch	1
30	Power Cord	1
31	Cord Retainer	1
32	Cord Fixing Screw	2
33	Handle Fixing Screw	3
34	Left Tool Handle Casing	1
35	Electrical Brushes	2
36	Label	1

NOTE: Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.

Assembly Drawing